DOCUMENT RESUME

ED 274 246 HE 019 680

TITLE	Purposes and Effects of Student Financial Aid. The Second of Two Background Papers on Student Financial Aid Issues and Options Prepared for the California Postsecondary Education Commission. Commission Report 86-16.
INSTITUTION	California State Postsecondary Education Commission, Sacramento.
PUB DATE	May 86
NOTE	25p.; For the first background paper, see HE 019 679.
AVAILABLE FROM	California Postsecondary Education Commission, 1020 Twelfth Street, 3rd Floor, Sacramento, CA 98514.
PUB TYPE	Information Analyses (070) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Academic Persistence; *Access to Education; *College Attendance; Educational Opportunities; Enrollment Influences; *Federal Aid; Higher Education; Parent Financial Contribution; Postsecondary Education; *State Aid; *Student Financial Aid
IDENTIFIERS	*California

ABSTRACT

The purposes and known effects of student financial aid programs in U.S. higher education are reviewed. The rationale for the creation of federal, state, and institutional financial aid programs is considered, including state grant and scholarship programs, independent college programs, work-study programs, special purpose programs, and private financial support. A review of literature about the impact of student aid on equal educational opportunity, which spans 4 decades, covers the effects of aid programs on: access and choice, retention and persistence, and incentives and disincentives to save for college. Initially, federal programs aimed at rewarding veterans and reducing manpower shortages. More recently, they have aimed at removing financial barriers to higher education for low income students, promoting wider choice of institutions, rewarding talented students, preserving the dual public-private system of U.S. higher education, and increasing international understanding. Research indicates that student aid contributes to greater access and choice, even though it has had little impact on the participation of low-income students. According to the literature, college attendance is a function of many factors, including parents' education and income, academic preparation and ability, and motivation and attitudes. A 40-item reference list is appended. (SW)

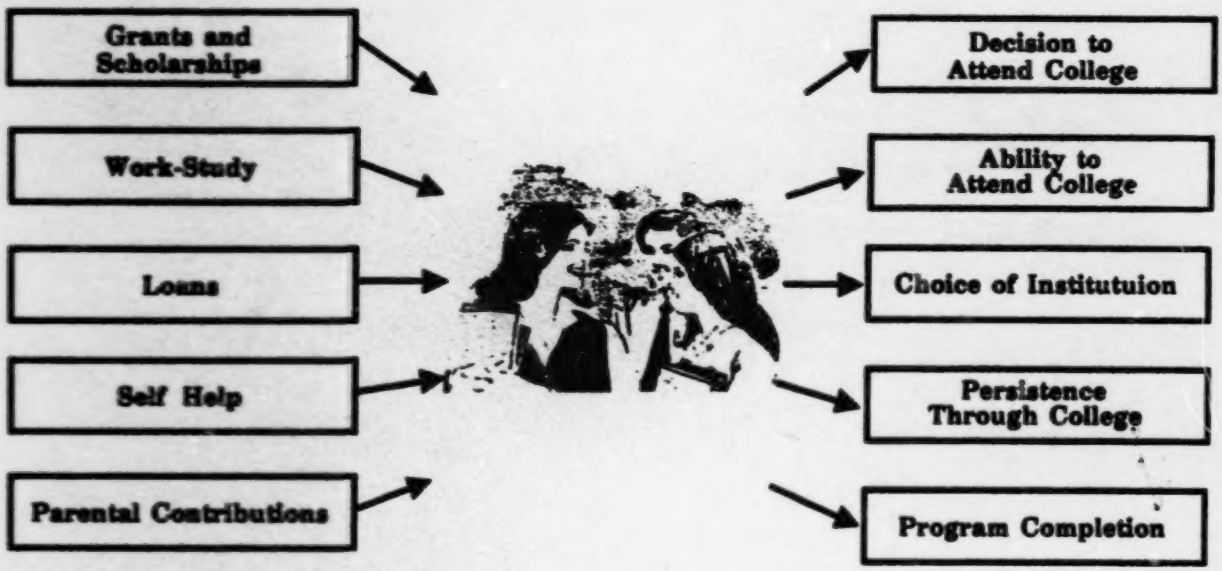
****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

HE

BEST COPY AVAILABLE

ED274246

PURPOSES AND EFFECTS OF STUDENT FINANCIAL AID



CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

HE 019 680

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Calif. Postsecondary Education Commission
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Background

This is the second of two background papers prepared as part of a study of financial aid policy issues in California undertaken during 1986 by the California Postsecondary Education Commission. The other paper focuses on State-funded financial aid in California but also discusses the extent of California's institutionally funded financial aid and trends and issues affecting financial aid for California's graduate students.

These two papers will be followed by a summary report on issues and policy options for financial aid in California on which the Commission is scheduled to act in October 1986.

This paper presents a two-part overview of the purposes and the known effects of student financial aid programs in American higher education.

- Part One on pages 1-8 reviews the purposes of federal, state, and institutional financial aid programs in terms of the rationale for the creation of these programs.

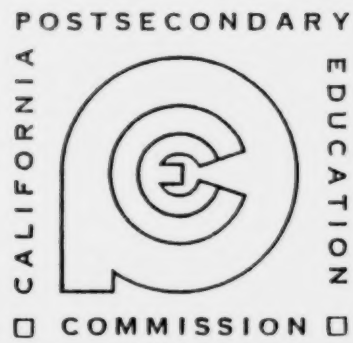
- Part Two on pages 9-15 discusses what is known about the impact of student financial aid on student decisions about whether and where to attend college as well as on student decisions or ability to persist in college. Although somewhat inconclusive, the research reviewed in this paper provides evidence that student aid programs have increased access to higher education, have widened student choice among institutional options, and have resulted in greater persistence in college. Finally, little evidence exists that student aid provides disincentives for families to save for college.

Additional copies of this paper may be obtained from the Publications Office of the Commission. Further information about the paper may be obtained from Suzanne Ness, the public information officer of the Commission, at (916) 322-0145.

PURPOSES AND EFFECTS OF STUDENT FINANCIAL AID

The Second of Two Background Papers
on Student Financial Aid Issues and Options
Prepared for the California Postsecondary
Education Commission
May 1986

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
Third Floor • 1020 Twelfth Street • Sacramento, California 95814



COMMISSION REPORT 86-16
MAY 1986

THIS report, like other publications of the California Postsecondary Education Commission, is not copyrighted. It may be reproduced in the public interest, but proper attribution to Report 86-16 of the California Postsecondary Education Commission is requested.

Contents

1. Purposes of Financial Aid 1

Federal Programs 1

State Programs 3

Institutionally Funded Programs 6

Private Donors and Employers 6

Conclusion 7

2. Effects of Financial Aid 9

Effects on Access and Choice 9

Effects on Retention and Persistence 13

Incentives and Disincentives to Save for College 15

Conclusion 15

References 17

1 *Purposes of Financial Aid*

THIS report briefly reviews the purposes and the known effects of student financial aid programs in American higher education in order to assess the success of these programs in achieving their purposes. This first part of the report reviews the rationale given for the creation of federal, state, and institutional financial aid programs. Part Two discusses what is known about the impact of student financial aid programs on student decisions about whether and where to attend college as well as on student persistence in college and saving for college.

Federal programs

Historically, federally funded student financial aid programs, like state-funded and institutionally funded programs, have sought to achieve a variety of objectives, most of which have been prompted by broad social and economic concerns. Initially, federal programs aimed at rewarding those who contributed military service to the nation and at reducing manpower shortages in the economy. More recently, they have aimed at removing financial barriers to higher education for poor students (commonly referred to as the expansion of higher education opportunities), promoting wider choice of institutions, rewarding talented students, preserving the dual public-private system of American higher education, and increasing international understanding.

The 1944 GI Bill and the 1947 President's Commission on Higher Education

The federal role as the provider of direct student aid began in earnest with the Service Man's Readjustment Act of 1944 (the G.I. Bill). According to the Advisory Commission on Intergovernmental Relations in 1981, the primary purpose of the act was not the promotion of education per se, but rather the promotion of national economic policy and national defense which "helped to smooth out the post war economy's readjustment to the millions of ex-soldiers returning from war and to repay a national debt of gratitude for their wartime service" (p. 14).

In 1947, President Truman's Commission on Higher Education made the most noteworthy effort to date to formulate a comprehensive federal policy toward higher education and, in particular, to student financial aid. Indeed, the germinal ideas for all the key federal student aid programs (and many of the state programs) eventually enacted can be found in the Commission's report, *Higher Education for American Democracy*, which argued that U.S. colleges and universities "can no longer consider themselves merely the instrument for producing an intellectual elite; they must become the means by which every citizen, youth and adult, is enabled and encouraged to carry his education, formal and informal, as far as his native capacities permit."

The Commission noted that the increasing complexity of national life and world affairs made it imperative to convert America's "democratic ideal" into a "living reality" by eliminating the barriers to equality of educational opportunity.• It contended that equal educational opportunity was unachievable unless economic, racial, ethnic, and sexual barriers were eliminated, and it also recommended that such barriers be eliminated or minimized by providing financial assistance directly to students.

The 1958 National Defense Education Act

The National Defense Education Act (NDEA) in 1958 rationalized the federal government's intervention

• "Equal education opportunity" has come to be seen as consisting of three basic parts -- equal access to college, reasonable choice of institutions, and continuous support to promote retention and persistence. These elements can be given the following "generic" definitions:

Access: The provision of sufficient support to guarantee that students can attend the least costly alternative for which they qualify. Access is provided through low or no public tuition and fees, as well as direct student aid for subsistence, supplies, transportation, and other costs.

Choice: The provision of sufficient support to enable students to choose among the institutions for which they qualify.

Retention or persistence: The rate at which enrolled students complete a predetermined period of study. Retention rates are typically computed either on the basis of an academic year or persistence to the completion of degree requirements.

in higher education for the purpose of countering the advances of Soviet technology as manifested by the launching of Sputnik. To promote broader educational access and equal opportunity, the act provided student loans "for the purpose of expanding the pool of educated manpower for an increasingly technological society" (Congressional Budget Office, 1980, p. 1). According to Martin Kramer, a long-time observer of student aid, the act was less concerned with providing educational opportunity as such than with recruiting the talented (1983, p. 62):

> The rationale behind the National Defense Education Act (NDEA) of 1958 . . . was not that the nation owed a special group an opportunity for education but that the nation needed a special group -- the talented -- whose education could help in scientific and technological competition with the Soviet Union.

The 1965 Higher Education Act

While the Economic Opportunity Act of 1964 established the College Work-Study Program, the landmark Higher Education Act of 1965 -- a tribute to the Johnson administration -- cemented a platform of federal support for both higher education institutions and students, while advocating full educational opportunity as the national goal. Title IV of the Act created a need-based student aid delivery system that included the Educational Opportunity Grant Program (later redefined as the Supplemental Educational Opportunity Grant Program) and the Guaranteed Student Loan Program. While the grant program was targeted at low-income families, the loan program aimed at easing the economic pressures confronting middle-income and upper-income families. The writers of the act were particularly interested that federal student aid serve educational "equity" -- that is, equal or uniform treatment of individuals from similar economic circumstances. Specifically, they perceived the aid programs authorized by the act as critically important in reaching the goals of educational equity, equality of opportunity, and greater involvement of minorities in higher education. As one scholar in the field pointed out, "perhaps as much as or more than equity by family income, considerations of racial equity were the driving forces behind the student aid programs of the late 1960s and early 1970s" (Leslie, 1977, p. 29).

The 1972 Higher Education Amendments

The purpose of what became the Higher Education Amendments of 1972 was clearly articulated by President Nixon in his March 1970 message to Congress on higher education:

> The security of the Nation requires the fullest development of the mental resources and technical skills of its young men and women . . . . We must increase our efforts to identify and educate more of the talent of our Nation. This requires programs that will give assurance that no student of ability will be declined opportunity for higher education because of financial need.

The Higher Education Amendments of 1972, which have been described as "the most sweeping aid to education bill ever enacted," considerably enhanced the democratization of college opportunities in America. Their centerpiece was the Basic Educational Opportunity Grant (BEOG) Program -- now called the "Pell Grant" Program -- which solidified Congressional commitment to equal education opportunity and, more importantly, to the federal government's new policy of aid to students rather than to institutions. To students whose families' estimated financial resources for meeting college costs were less than a stipulated amount (the "ceiling"), this program awarded aid equal to the difference between their estimated resources and the ceiling. Particularly important, its formula determined eligibility as well as award size solely on the basis of financial need, while being blind not only "to any distinction among students on the basis of their talents, their special claims on the public, or their institution and its location," but also "to the relative poverty of the student, since by lowering or raising the ceiling figure, eligibility could be restricted to the destitute or opened to the affluent" (Kramer, p. 64).

With the BEOG program well accepted as the federal government's "access" program, a principal source of "choice" in federal aid dollars appeared to be in the Supplemental Educational Opportunity Grant (SEOG) Program, where the implications for the private sector were promising. "By providing grants to students of exceptional need," according to Robert N. Kelly, "this program offers an excellent opportunity to close the tuition gap" (1980, p.19). Another source of "choice" created by the 1972 legislation was the

State Student Incentive Grant (SSIG) Program, which sought to induce a greater state role in student aid by providing federal matching funds for need-based state scholarship programs. In *Public Policy and Private Higher Education* (1978), David Breneman and Chester Finn depicted the SSIG program as the best vehicle through which the federal government could support "choice," particularly since they viewed the states as "the most likely source of future growth in student assistance programs and the best place to develop choice programs because many such programs already exist at the state level" (p. 23).

The 1978 Middle-Income Student Assistance Act and cutbacks during the 1980s

The Middle-Income Student Assistance Act of 1978 greatly expanded the base of student eligibility for federal aid, but by 1981 the era of dramatic growth in student aid funding had ended. In the early 1980s, federal aid policy was being challenged by political as well as fiscal realities -- characterized by a new administration intent on reducing the role of government in public affairs, as well as austerity measures to control the burgeoning federal deficit. Policy makers were increasingly concerned about the accountability and efficacy of federal aid programs in serving the truly needy and motivated. Nonetheless, following early attempts by the Reagan administration to slash the budget and reduce the federal role in higher education, Congress conceded few major changes in the student aid programs until the Gramm-Rudman Balanced Budget Amendment of 1985. Thus existing federal aid programs remained largely intact, as Charles Sauders of the American Council on Education observed (1983, p. 119):

> Remarkably, the system of federal aid remains essentially unchanged. Despite its complexities, uncertainties, and redundancies, the structure has proved less vulnerable than it had appeared. It has absorbed the most powerful assault ever made on its foundations and survived without permanent damage. Congress, urged to make radical changes, has chosen more of the same instead.

State programs

Historically and constitutionally, the primary responsibility for funding higher education in America has resided with the states. In essence, the states provide students with two forms of public subsidy--student financial assistance, and low educational costs charged through low tuition and fees made possible by state appropriations to public colleges and universities. According to Jane Johnson (1981, p. 35):

> For what appear to be primarily historical reasons, some states have made extensive use of the student aid mechanism; others have funded higher education almost exclusively through appropriations to public institutions which in turn offer waivers or low tuition to students .

Some states with strong private college sectors, such as Massachusetts, Minnesota, New York, and Vermont, have allocated large sums of monies to student financial aid. On the other hand, in low-tuition states such as Arizona, California, and Texas, where the presence of independent institutions is small (in relative terms), state funds for student aid are also small.

The purposes of state student aid programs have largely matched those of the federal programs by promoting equal access and choice to higher education for all, especially lower-income groups. However, state programs vary considerably due to the diversity among states in their interests, traditions of higher education, demographics, and wealth.

A recent definition of the purpose of state-funded student aid programs is provided by Boyd (1975, pp. 118-119):

1. Manpower needs--that is, to recruit future teachers or nurses.
2. Veterans' benefits (dating back to the Civil War).
3. Assistance to the physically handicapped for vocational training.
4. Recognition of academic achievement and potential.
5. Inclusion of financial need along with academic ability.

6. Emphasis on financial need, rather than ability, as main criterion.
7. Elimination of categorical programs, with specific targeted recipients subsumed in large comprehensive programs.
8. Provision for use of scholarship and grant awards at private colleges and universities.
9. Appropriation of funds to meet matching requirements of federal student aid programs.

Unlike the federal programs, state student aid programs cannot easily be summarized, not only because each state system of higher education is unique, but also because each state has created aid programs designed to meet its own special needs and objectives for higher education. Indeed, the states operate significantly different scholarship or grant programs, and some but not all have created state-funded work-study programs, student loan programs, and other aid programs for their independent institutions. In addition, state methods of coordinating state and federal aid vary significantly.

In most states, the major objective of student financial aid has been "to provide sufficient financial support so that, in combination with federal and institutional funds and parental and student contributions, each qualified student who demonstrates need can afford to attend the postsecondary institution of his or her choice" (Herndon, 1982, p. 39). The importance of this commonly shared objective is that it is premised on the goals of access, choice, and retention -- all of which are important concepts, and "catchy" words, in the current language of student aid policy. In order to accomplish these as well as other important state objectives, a multitude of state student aid programs are currently operating across the country. What is learned from scanning these programs nationally is the differences among them: Some are strictly need-based, while others are strictly non-need based; some are limited to students at public institutions, while others serve only private college students. Yet when one attempts to identify the common or most salient characteristics of these programs as well as the purposes for which they were designed, a number of program "categories" emerge. A treatment of the purposes of all state aid programs is not practical or feasible here, but a discussion of selected examples in each of these categories can serve this review well. (An exhaustive and thorough description of all state student aid programs is published annually by the National Association of State Scholarship and Grant Programs.)

State grant programs

One category of state student aid programs is more common than any other, namely; the need-based grant programs, which are open to all students regardless of previous academic performance. As indicated below, the primary purpose of these programs has been to serve student access and choice; in many cases, they have enabled even middle-class students to enroll in more expensive, selective institutions.

> This type of program is more truly an access program than the scholarship type. But again, most states use a relative-need system for awarding funds, which clearly favors the independent sector and which explains why most state programs are choice programs. Because these programs are rarely fully funded, they tend to provide relatively little assistance to public college students. They do enable the middle-class student to attend the higher-cost selective institution, while less selective independent colleges with lower tuitions attract the more needy student (Kelly, 1980, pp. 24-25).

Florida's Student Assistant Grant Program and California's Cal Grant B Program fall under this category. For instance, in 1970 the California Legislature established the Cal Grant B Program -- the second of the state's financial aid programs -- for the purpose of assisting low-income, educationally disadvantaged students by providing grants to cover subsistence costs immediately, and tuition and fees after the first year. While the program requires that at least half of all the new recipients initiall attended a Community College, it nevertheless provides some degree of student choice among California's different public and private institutions.

State scholarship programs

This category of state student assistance programs includes the scholarship or merit-based programs in which student eligibility is based mostly on academic criteria such as standardized test scores, high school GPA, and high school class rank. Recog-

nized as the first state student assistance programs to be established, their primary purpose has been to provide in-state enrollment incentives to the state's most talented and, in the process, to help private institutions by defraying the private college tuition costs borne by talented students from families with modest means. While these programs originally focused on serving selected independent institutions rather than student access, recent changes among the states in program eligibility criteria, in addition to increased program funding, has increased access to the programs (Kelly, 1980, p. 24).

Indeed, the predecessor to California's Cal Grant A Program -- the State Scholarship Program, established in 1956 -- is more akin to this type of program than is its replacement. According to the California Postsecondary Education Commission (1982, p. 63), the State Scholarship Program was created to meet the more limited objective "of assuring that independent colleges were available to a limited number of highly talented students as an alternative to public institutions."

Independent college programs

A third category of state program can be termed the "independent college programs." Participation in these programs is limited to students attending independent institutions, and is designed to eliminate the tuition gap for needy students. "For high-need students, the award from this type of program coupled with a BEOG often results in lower net costs than at a public college" (Kelly, 1980, p. 25). It seems apparent that the primary purpose of these programs is to guarantee institutional choice, particularly to poor students, in addition to placing the state's independent institutions in a healthy competitive position.

Connecticut's Independent College Student Grants Program and Texas' Tuition Equalization Grants Program clearly fall into this category of program. At the present, no comparable program exists in California.

College work-study programs

A fourth category of programs consists of state-funded college work-study programs. A recent study by the College Board (1985) reports that interest in student work-study programs has increased dramatically in the states in recent years. According to the Board, "Some 17 states now fund student work study programs, and another 15 have plans for such programs at various stages of development" (1985, p. 15). Among the reasons given by the Board for this surge in interest in college work-study programs is that "state educators and legislators are concerned about the same problems apparent on the national scene -- rising higher education costs, decreasing access opportunities for lower- and middle-income students, and sharpened public perception that loan burdens of these students and their families are unreasonably high" (p. 17). Other explanations for the states' growing interest in these programs, as noted by the Board, include:

1. The need that state colleges and universities have for additional student aid resulting from the necessary hike in their tuitions;
2. The need to provide student jobs that are more integrated with educational programs -- arising from "the pressures of recent reports calling for the improvement in the higher education system, as well as persistent student demands for greater choice relevance in college studies";
3. The political popularity embedded in the idea of helping students work their way through college; and
4. The attractiveness of "the matching feature of the programs, which requires additional dollars to be generated by employers beyond state appropriation levels" (p. 17).

Indeed, the above discussion makes it clear that the purposes of college work-study programs are multiple. While California recently introduced legislation to create such a program, states such as Montana, Minnesota, North Carolina, and New York, already operate state work-study programs. A recent article, "Work Study: A Program to Fit the Times?" by a leading state observer (Mingle, 1985), anticipates the importance of the state work-study idea in the near future.

Special purpose programs

Included in this final category are those state student aid programs whose purpose is to encourage student participation in particular fields of study; to assist dependents of constituencies, such as veterans or police officers; or to serve particular groups, such as Native American students. Good examples of these programs are Florida's Seminole-

Miccosukee Indian Scholarship Program, Massachusetts' War Orphans Program, and Connecticut's High Technology Graduate Scholarship Program. California's Bilingual Teacher Grant and Law Enforcement Personnel Programs also fall into this category.

This review of current state student aid programs indicates that their purposes closely resemble those of federal aid programs, in that both espouse the goals of promoting equal access to higher education for all, and especially for low-income and other educationally disadvantaged students; of meeting the demand for skilled labor; of remedying past injustices; of expanding student choice; of ensuring the survival of certain types of institutions; and, in some cases, of achieving political compromises by ensuring financial relief for middle-income families.

Institutionally funded programs

Throughout their history, American colleges and universities have awarded both need-based and non-need-based financial assistance to their students. Indeed, long before state and federal student aid programs came into existence, American students were extended opportunities to higher education in the form of institutionally funded scholarships.

The purposes of institutionally funded student aid programs are numerous, and they vary depending on the objectives and aspirations of the institution. For the most part, however, these programs complement the federal and state goals of serving student access and institutional choice, of attracting and rewarding talented students, and of improving student persistence and retention. Understandably, however, unlike their governmental counterparts, institutional aid programs have as their major objectives the securing of institutional integrity and autonomy, the promoting of institutional vitality, and -- in some cases -- the ensuring of institutional survival.

Today, institutionally funded student aid include need-based grants, non-need-based academic scholarships, athletic and artistic scholarships, college-sponsored work-study programs, fellowships, research and teaching assistantships, institutional long-term loans, employee-benefit discounts and waivers, and discounts and waivers for employee dependents. The criteria used by institutions to determine the type and size of need-based and non-need-based awards says much about their goals and aspirations. For example, as Richard Dickmeyer says, "need-based institutional aid is generally used to augment federal and state need-based programs, thus promoting greater access to college for prospective students who would otherwise have difficulty paying for their education" (1981, p. 31). Need-based aid also clearly serves to promote student choice, but the extent to which choice is actually promoted depends on the tuition levels of the institution and the resulting "net costs" facing the students despite the aid. For instance, both access to college and student choice of institution is best fostered when high-tuition, selective institutions award large amounts of institutionally funded need-based awards.

By comparison, non-need-based institutional awards serve largely as recruitment devices or as rewards for outstanding achievement. They are extended to those students who are likely to contribute positively to the institution's student-body profile, educational environment, and reputation. Thus they operate as a tool for the selective recruitment of students who have special academic, athletic, and artistic abilities, or who can enrich the culture of the institution.

One of the key purposes of institutional aid is to preserve or enhance an institution's financial health. Because institutionally funded student aid plays a major role in an institution's pricing policy, its potential impact on the institution's financial vitality can be substantial. Specifically, institutional offers of aid influence student demand and students' perceptions of the cost-benefit of the institution's educational offerings. In turn, aid serves to influence the institution's enrollments and, hence, its inflow of tuition and fee revenue. Many "demand" studies of the effect of price on enrollment have noted the importance of institutionally funded student aid in influencing student decisions to attend particular institutions. Thus some positive changes in an institution's market position and, consequently, in its financial health, are feasible through effective and efficient offers of institutionally funded aid.

Private donors and employers

The history of philanthropy to financially needy students in American higher education is a long-standing and proud one -- dating back to 1643, when Lady Anne Mowlson left 100 pounds to Harvard College to

assist poor scholars (Hood and Maplethorpe, 1980, p. 61). It continues to this day, as illustrated by these examples from a recent statement by the National Association of State Universities and Land-Grant Colleges and the American Association of State Colleges and Universities on "The Impact of Private Investment on Public Colleges and Universities" (1985, pp. 3-4):

> A Projected Leadership Program at the University of Connecticut, funded by corporations and individuals in the state, provides scholarships to promising minority students to free them from the need to take outside jobs to meet educational costs.
>
> More than $1.5 million has been provided by private sources to generate scholarships for students in the School of Agriculture and Natural Resources at the California Polytechnic State University in San Luis Obispo.
>
> A grant of $805,850 by the Benedum Foundation of Pittsburgh is designed to match West Virginia University's Foundation funding in financing a doctoral fellowship program to attract outstanding students, shorten the time required to earn a degree, and compensate for cutbacks in federal support.
>
> A gift of $1 million in appreciated stock securities to the University of Tennessee from former mail carrier Clayton Arnold assists students planning to be teachers.

The goal of such philanthropy from private citizens, foundations, and corporations has often been simply that of serving as a supplemental source of support for any students that colleges or universities determine to be in need. Not infrequently, however, its goal has been to aid special types of students -- such as those from particular localities, in particular specialties, or even with particular family names. Today, for example, many corporations underwrite postsecondary education for employees, both through in-house contracted instruction and through tuition-remission or tuition-aid programs for on-campus instruction, and the purpose of this assistance tends to be career related, if not job specific. While some employers will reimburse employees for any type of course or program taken at an approved college or university, others limit reimbursement to courses related to the employees' work. Thus Ernest Lynton contends, "corporate education continues to be, by and large, a tactical, not strategic, device to satisfy immediate needs" (1983, p. 19); and Suzanne Morse concludes that "the short-term training and education required for a particular project, product, or technology may often take precedence over long-term educational objectives, and the reasons most often given for this approach are money and time" (1984, p. 3).

Conclusion

Numerous rationales have been developed by the federal and state governments, by institutions of higher education, and by private donors and employers for student subsidies. Over the past four decades, student financial aid programs have assumed many functions, but either implicit or explicit in these rationales is the widely held perception that student aid -- and through it, higher education -- can contribute to the solution of many of society's ills.

Because the advocates of student aid are many -- and some of them are quite powerful -- ambitious purposes of student aid will continue to be proclaimed and defended. At a minimum, these advocates stand firm on the belief that student aid is the best vehicle for advancing equal educational opportunity.

2 *Effects of Financial Aid*

TO what extent has student financial aid accomplished its objectives? Although inconclusive to some degree, the research reviewed in this part of the report provides evidence that student aid has increased access to higher education, widened student choice among institutions, and resulted in greater persistence in college. Research findings based on national data illustrate the methodological complexities of assessing the impact of student aid on participation in higher education by the poor, and while these findings indicate that this aid has done little to increase participation by low-income groups, they confirm that this aid has made some difference. Today, a larger portion of high-ability but poor students are in college than 25 years ago, and considerable gains have been made by women, followed by racial minorities.

This review of the literature about the impact of student aid on the achievement of equal educational opportunity spans four decades and covers investigations ranging from broad nationwide surveys to narrowly focused single-institution studies. For the purpose of clarity, the following pages first discuss the effects of aid on access and choice, then its impact on retention or persistence, and, finally, its consequences for the willingness of parents and students to save for college.

Effects on access and choice

At least nine studies over the past 11 years on the impact of student aid on access and choice warrant review here.

Fife, 1975

In 1975, Jonathan D. Fife conducted an exhaustive review of some 165 studies on the effects of student aid on equal educational opportunity. He reached the general conclusion that aid plays a significant role in encouraging opportunity, but with two caveats -- first, that other factors, such as family values or quality of academic preparation, may have a greater impact on access and choice than aid, and second, that:

> The current available research is equivocal about the extent to which student aid is a viable means to promote the goals of access and choice. This lack of precision is due both to the complexity of the various influences that affect a student's desire to pursue further education and the style of research used to examine this problem. Research studies have identified four major influences that affect both access and choice: parental influence, academic ability and achievement, financial strength, and peer influence. However, these studies have not identified conclusively the order of importance of these influences, nor have they identified to what degree each influence is the result of the other. For example, what degree of parental support is the result of the parents' financial strength or their perception of their children's ability to benefit from a further education? (p. 51).

According to Fife, while research through 1975 did not determine the effectiveness of financial assistance in achieving access and choice as compared to other means, it did demonstrate that this assistance was of significant benefit for those students who were motivated to continue their education. Pertaining to this finding, Fife stated (p. 52):

> the type of education to which a student aspires is influenced by his confidence: (1) that he can afford an institution, and (2) that he has sufficient resources to achieve his overall objectives. If a financially disadvantaged student is qualified to attend a university but does not know how much assistance will be received, there is a greater chance that he will aspire only to institutions he can realistically afford.

Fife and Leslie, 1976

In 1976, Fife and Larry L. Leslie surveyed recipients of scholarship and grant programs in California, New Jersey, New York, and Pennsylvania in order to assess the extent to which these programs were

achieving their access and choice objectives. They found that almost 50 percent of the respondents indicated that they would not have enrolled without aid and that their institutional options were increased as a result of state student aid, since between 68 and 88 percent more of them were attending their first-choice institutions -- even high-cost private four- and five-year colleges and universities -- than were appropriate comparison groups. Thus Fife and Leslie concluded that state scholarship and grant aid was a substantial factor in furthering the goal of equal educational opportunity.

Suter and Leslie, 1977

In 1977 two major investigations of the impact of financial aid on access largely contradicted Fife's conclusions of 1975 that student aid had a beneficial impact on participation rates of low-income students.

- In *Trends in College Enrollments by Family Income for Regions of the United States*, Larry E. Suter reported that on the basis of U.S. Census data, participation rates of low-income 18-to-24-year olds (as determined by family income) remained almost unchanged between 1968 and 1975. Suter also found that participation rates for Black students increased considerably between 1970 and 1976, but the participation of high-income Black students was substantially higher than that of low-income Black youth.
- In *Higher Education Opportunity: A Decade of Progress*, Larry L. Leslie used data from both the U.S. Census and the Cooperative Institutional Research Program to assess the degree of progress made in the previous decade among the poor, minorities, and women in meeting the three major goals of student aid -- access, choice, and retention or program completion. Pertaining to retention or program completion, Leslie reported that none of the three target groups fared well, but he also added that trend data needed for assessing their progress were lacking. More encouragingly, he reported that the status of racial minorities in American higher education had improved considerably over the previous decade and that parity in college access and choice had been achieved for minority students as a whole. He noted, however, that while low-income youth improved their position over this period vis-a-vis other income groups, they continued to be underrepresented in higher education. In other words, this finding paralleled that of Suter; namely, that participation rates of low-income groups had changed very little despite the growth in federal student aid. As Leslie cautioned early in his report (p. 2):

> . . . it should be acknowledged that in addition to student aid, numerous other variables act to affect enrollments. Money or the lack of it is not the major force acting on the attendance decision for many students. The impression should not be gained that student aid will solve national equality problems.

Astin, 1978

In 1982, Steve Herndon cautioned legislators and policymakers about making inferences from research such as that of Suter and Leslie because it was not methodologically capable of, or appropriate for, assessing the direct impact of student aid. He argued, instead, that "multivariate analysis is the best method for such research because it permits the researcher to separate the independent effects of different variables" (p. 40).

According to Herndon, one major study to employ that methodology was Alexander Astin's *The Impact of Student Financial Aid Programs on Student Choice* (1978). The key objective of Astin's study was to ascertain whether various federal and state financial aid programs influenced secondary school students' decisions about what type of postsecondary institution to attend. The multivariate analysis that he conducted served to determine how students' institutional choices were affected by (1) student characteristics such as high school grades, ability test scores, sex, race, family education, and family income; (2) the characteristics of the students' educational environment; (3) state and federal financial aid programs; and (4) student aid packages offered by competing educational institutions. Among his major findings were the following:

- In states where the per-student award was large, students tended to enroll in home-state institutions -- usually in small, nonselective, private colleges, or in public community colleges.
- In states receiving large amounts of federal campus-based program dollars per student, a majority of students enrolled in out-of-state colleges and more chose high-cost and highly selective institutions.

- In states with substantial aid programs, high-ability students tended to select private institutions, while low-ability students tended to enroll in public institutions and especially in two-year colleges. (Astin reasoned that this development was a result of the merit component often built into state aid programs, which serves to limit eligibility to the highest achieving students.)
- When state aid program appeared to be strong and effective, high-ability students seemed encouraged to select an institution in their home state.
- Students tended to select the institution which offered the largest grant award, and they were less sensitive to the relative amounts of loan or work-study assistance offered.
- Once students knew the relative size of the grant offer, the total size of the aid package did not seem to affect student choice of institution.
- When students were confronted with a decision between competing public and private institutions, the final decision was based primarily on "net tuition" -- that is, tuition minus total financial aid. The smaller the "net tuition" of the private institution, the more often students selected that institution.

In conclusion, Astin's data not only supported the view that federal and state financial aid programs exert a major influence on student "choice" decisions but also enhanced understanding of how various types of programs affect these decisions.

Hansen, 1983

In 1983, W. Lee Hansen used two sets of data to assess the effectiveness of financial aid programs in widening access to college, as measured by the extent to which the number of college-age youth attending or planning to attend college increased as a result of the availability of federal assistance. One set of data, from the Current Population Survey, compared enrollment rates for college-age youth by sex, ethnic background, and family income level. The other, from two longitudinal surveys of high school seniors -- the National Longitudinal Study of the High School Class of 1972, and High School and Beyond: A National Longitudinal Study of the 1980s -- compared planned and realized enrollment rates for high school seniors by socioeconomic status and ability levels. Hansen concluded as follows (p. 89):

> This review of data on enrollment expectations has failed to produce any substantial evidence that the greater availability of student financial aid from 1972 to 1980 altered the college enrollment plans of high school seniors differentially by socioeconomic status [SES] and ability. While some of the minor increases for low-SES relative to high-SES students are consistent with possible positive effects of financial aid, there are enough other changes for middle- and high-SES students to cloud any conclusion that might be drawn about the efficiency of student financial aid in affecting access.

In attempting to explain his findings, which obviously were contrary to expectations, Hansen offered the following plausible explanations:

- First, perhaps financial aid was "insufficiently well targeted significantly to affect access" (p. 95). That is, because the aid also sought to serve "choice," many middle-income and some upper-income students qualified for aid, thus blunting the access-improving impact of aid directed to lower-income students.
- Second, perhaps the amount of student aid offered was insufficient to generate the anticipated response. "Moreover, to the extent that lower-income students believe their future income prospects are not favorable, the inducements to attend college offered by financial aid may have been too low to produce any large-scale response" (p. 95).
- Third, perhaps if the amount of financial aid had been less than it was, enrollment rates of low-income students would have declined or increased less than they did.

Zollinger, 1984

In 1984, Richard A. Zollinger examined factors associated with students' choice decisions, based on a sample of 2,567 aid recipients from the Illinois State Scholarship Commission. On the basis of these data, Zollinger arrived at two major conclusions:

- First, private colleges appeared to be most affordable for high-achievement students as well as for a few affluent middle- and lower-achievement students. This implied, according to Zollinger, that middle-achievement, middle-income aid recipients were unable to attend expensive private institutions although they were admissible to them.

- Second, differences in college choice were linked to family income, in that students with higher family incomes were more likely to afford a greater range of college choices than lower-income aid recipients, when race, sex, and academic achievement were controlled. The implication, Zollinger added, was straight forward: "Financial aid does not sufficiently compensate for student differences in parental income, particularly among low-achievement, low-income Blacks and other minorities" (p. 130).

New York State, 1984

A 1984 survey conducted by the New York State Higher Education Services Corporation examined the role of financial aid in college access and choice for different ethnic groups in New York. It found that Black, Hispanic, and Asian aid recipients (in that order) were more likely than Caucasian recipients to perceive financial aid as "essential" in their access to college. According to the Corporation, this difference may stem from the fact that minority students were more dependent on need-based aid than majority students or that smaller percentages of minority students received financial support from their parents. The survey also found that minority students attached a greater significance to scholarships than other students in determining their choice of institution. The Corporation concluded that "this reflected the higher incomes and relatively greater dependence on loans and family contributions rather than need-based aid among Caucasian full-time undergraduate respondents" (p. 28).

Leslie, 1984

Using data from the National Longitudinal Study and the Cooperative Institutional Research Program surveys, in 1984 Larry Leslie examined changes over time in the amounts financed by various student groups, including racial minorities, part-time attendees, and low-income youth. The following are among his major findings:

- Overall, student "opportunity to enroll" has been enhanced through lower net prices in higher education.
- The net price paid by students in the National Longitudinal Study tends to be highest for Hispanic students, followed by Asian Americans and white students, while the lowest are paid by American Indian and then Black students.
- Equity or "equalness" by racial or ethnic group does not exist when the "share" of college expenses paid is considered, because students in public and two-year institutions pay higher net price shares, and minorities disproportionately attend these institutions.
- With regard to ability, need-based student aid programs tend to favor lower-ability students, and these students tend to receive less financial aid from family and friends, borrow slightly less, earn less, and attend less expensive institutions than more able students. Leslie reasons that because federal need-based grant programs provide disproportionately more money to low-ability students than to the highly able, institutional and state grant programs target their resources more to high-ability students.

Ahumada, 1985 and 1986

Two state tuition and student-aid case studies of Connecticut and Minnesota by Martin Ahumada for the Education Commission of the States reveal what government staff and political leaders active in higher education in those two states believe to be the major driving forces behind student decisions about attending college:

In Connecticut, the Board of Governors' staff emphasized that no statistical evidence existed to show that recent tuition increases there had negatively affected enrollments in any of Connecticut's segments of higher education -- or that the "stated" or "advertised" price, as opposed to the "net price," of higher education in Connecticut had influenced students' decisions to attend college. They argued that student perceptions of quality were more important than price considerations. That is, according to Ahumada (1986, p. 32):

> . . . student decisions to attend college are based not as much on the price tag as on (1) family traditions and expectations, (2) student ability and past academic performance, (3) the location and attractiveness of an institution, and (4) the uniqueness of the program. It was pointed out, for example, that more upper-income students are being attracted to the University of Connecticut because they have learned the institution is capping its enrollments and becoming

more selective in its admissions. Finally, board members contend that the quality of academic and career counseling at the high schools does more to influence student decisions about college than do price matters.

In Minnesota, according to Ahumada (1985, p. 32), "the general feeling is that student decisions whether to attend and where to attend are *not* made on the basis of finances (prices) but are influenced more by actions taken by peers (i.e., "My friend will go to college in St. Cloud, so I will too").

To summarize the above research on access and choice, the evidence is clear that student financial aid contributes to greater access to college and wider choice among institutions, even though it has had little impact on the participation of low-income students. Perhaps the most consistent finding in the literature is that a students' likelihood of attending and completing college is determined as much, if not more, by the education and income of his or her parents and by his or her academic preparation and ability. The importance of student aid, then, is not in dispute, but rather the belief that student aid by itself can do so much to solve the nation's problem of inequality of educational opportunity. Indeed, wider participation of low-income youth in higher education is unlikely without social and educational interventions to improve students' attitudes -- some of which are cultural -- about higher education, their knowledge of the availability and process of financial aid, and their academic preparation.

Effects on retention and persistence

Two reviews of the literature on the impact of student financial aid on retention and persistence -- those of Herndon (1982) and Voorhees (1985) -- are excellent references and form the basis for some of the following summary.

Astin, 1964, 1973, and 1975

Without question, Alexander Astin's research comprises a considerable amount of the pertinent literature on the factors affecting student retention and academic achievement. One of his early studies on college dropouts (1964) revealed that academically talented students who dropped out of college were likely to come from lower socioeconomic backgrounds and to have lower college aspirations than those who graduated. This finding implied to Astin that intelligence was of less importance than ordinarily assumed in predicting students' academic attainment.

In 1973, Astin reported that the provision of a grant would increase the odds of completing college in four years by 10 percent, with the odds increasing to 15 percent if the grant comprised a significant proportion of the student's total support. In the case of a student who received no financial aid -- neither grants or loans -- the probability of completing college in four years actually dropped by 15 to 20 percent.

Among the few studies that have examined how the packaging of different types of financial aid affects program completion is Astin's 1975 study of the effect of various financial aid packages on persistence in higher education. Overall, his findings were that: (1) any form of aid seemed most effective if it was not combined with other types of aid; (2) participation in college work-study programs seemed to increase student retention, especially among women and Black students; (3) work-study appeared to have its most consistently positive impact among middle-income students; (4) work-study was the most effective type of aid when no other combinations of aid were involved; (5) grants were most effective when the recipient received no loan; and (6) the combination package that rendered the greatest persistence was work-study and *major* -- rather than minor -- loan support.

Sewell and Blanchfield, 1971

Sewell's cogent research of 1971 rendered similar findings to those of Astin's 1964 work. According to Sewell, students from higher socioeconomic status backgrounds entered and completed college at much greater rates than students of equal or even greater ability but from lower socioeconomic backgrounds. This evidence was so conclusive to Sewell that he championed the importance of encouraging educational aspirations in all socioeconomic groups vis-a-vis the wide availability of grant assistance.

Astin's 1973 findings corresponded with those of a 1971 study by Blanchfield that the size of scholarships correlated positively with persistence. According to Herndon (1982, p. 42), Blanchfield's study "was controlled in such a way that he was able to demonstrate that the relationship between receiving

a scholarship and persistence was not merely an artifact that resulted from making such awards primarily to more able students." This same research by Blanchfield seemed to indicate that while grants motivated students to persist, loans did not.

Jensen, 1981 and 1984

Through his 1981 and 1984 studies of students at Washington State University, Eric L. Jensen has contributed some of the most important research findings about the relationship between financial aid and persistence. He has shown that the receipt of aid has a small positive influence on degree completion and that the denial of aid to applicants who were ineligible for aid under institutional and governmental eligibility criteria has a negative impact on degree attainment. He also finds (1984, p. 126):

> An aid package made up of grant, loan, and work study in which grant represents the largest single element of the package and work study the smallest is found to be the most effective for enhancing the completion of a degree program. On the other hand, a grant-loan package in which grant aid represents the largest component is found to be detrimental to degree attainment.

Voorhees, 1985

In 1985, Richard A. Voorhees examined the relationship between federal aid programs and the demographic characteristics, academic achievement, on-campus residence, cumulative grade-point average, and persistence of financially needy freshmen at an urban commuter university. His major findings included the following:

- The direct effect of financial need is detrimental to both cumulative grade-point average and persistence, and federal campus-based programs have the mediating effect of lessening the negative impact of financial need on both variables.
- College work-study was found to have a positive total effect on new freshman persistence.
- Regarding the federal College Work-Study Program, the Supplemental Educational Opportunity Grant Program, and the National Direct Student Loan Program, "it is not appropriate to say that one program should be substituted in place of another to promote persistence, since no single program was found to be statistically significant in its direct effect on persistence" (p. 28).
- Contrary to other findings that loans prevent persistence (Astin, 1975; Wenc, 1983), this study produced no evidence that loans have a negative effect on new freshman persistence. As Voorhees contends, the "future commitment implied by receipt of a loan may pose sufficient incentive for students to approach college more seriously" (p. 28).
- High school rank was positively associated with persistence, while ACT composite scores, sex, and minority status were *not* significant in explaining persistence.
- Controlling for the effects of other variables, students living on campus were found to earn significantly higher cumulative grade-point averages than other students, and persistence was greater for state residents than for nonresident students. Voorhees concludes: "Integration within an institution and identification with a particular campus appear to be key components in the academic performance and persistence of new freshmen with high financial need" (p. 29).

University of California, 1980, and California State College, Bakersfield, 1984

Finally, two retention studies in California have examined the impact of financial aid:

- In 1980, the Task Force on Retention and Transfer of the University of California found that University dropouts blamed "external factors," especially "personal reasons," for leaving the University, and it found no significant difference in the percentage of persisters and dropouts who received financial assistance, nor any differences by the type of aid they received.
- In 1984, Steve Herndon reported on his study of persisters and dropouts among financial aid recipients at California State College, Bakersfield (CSCB). Using discriminate analysis to determine the association between persistence and 14 student attributes -- sex, age, ethnicity, degree objective, financial need, marital status, number of children, residence, scholarship award, grant award, loan award, college work-study award, "admissions eligibility" (a composite of high school grade-point average and standard aptitude test scores), and "Pell Grant eligibility" (a conjec-

tured index of socioeconomic status). His findings suggested that "the financial aid recipients more likely to persist at CSCB are those who have good high school grades and standardized aptitude test scores, reside in the college residence halls, and receive CWS [College Work-Study] as a type of aid" (p. 367). Moreover, while participation in College Work-Study clearly had a positive effect on persistence, the receipt of grants and loans did not seem to have a similar effect. Finally, like Astin, Herndon found that "students living on campus are much more likely to persist than those who live off campus" (p. 368).

Collectively, the literature on the effects of student financial aid on retention and persistence has important implications for financial aid packaging. It provides evidence that these effects are by and large positive but that grants and work-study assistance will likely encourage persistence, while loans -- unless they are minimized or mixed with other, larger forms of aid -- will discourage persistence.

Unfortunately, little is known about how cultural and other environmental factors influence different kinds of students to prepare for, pursue, and persist in college, or about about how different types, amounts, and combinations of aid, and different college options and costs affect different types of students and their decisions to persist in college. Yet, as is true with research on access and choice, evidence exists that students' persistence in college is correlated negatively with their socioeconomic background, and that parents from lower socioeconomic backgrounds are less willing than others to give their children moral and financial support to enroll and persist in college.

Overall, the research suggests that the receipt of grants and work-study assistance, as well as good academic preparation and on-campus residence, are the most consistent and pronounced motivators of persistence that can be manipulated externally. For many of the nation's colleges and universities, the need to improve student persistence and degree completion has become critically important. Obviously, then, their need to integrate financial aid services with other institutional services and broader social services is not negligible.

Incentives and disincentives to save for college

Concern has been expressed by some observers that the availability of financial aid may lead prospective college students and their parents to avoid saving for college. For example, Martin Ahumada found extensive criticism of federal aid policies among some trustees of the University of Connecticut, who believe that federal aid policies have been capricious and arbitrary, with the result that "families and students who do not save for college -- those who are irresponsible -- have received more federal student aid" while savers were "not rewarded" (1986, p. 47).

In a 1986 report commissioned by the College Board, Karl E. Case and Michael S. McPherson examined the incentives and disincentives caused by student aid programs for families in saving for college . Case and McPherson concluded that except for a small portion of aid applicants, disincentives to save are virtually nonexistent for recipients of grants under the large federal grant programs. They attributed this lack of effect to the fact that these federal funds are "rationed" to students from the poorest families. However, they concluded that, to the extent disincentives to save exist, such negative incentives derive mostly from institutionally awarded aid.

Conclusion

Overall, the combined positive effects of student financial aid on access, choice, and retention or program completion is substantial, and little evidence exists that student aid provides disincentives for families to save for college. Yet participation in higher education is a function of many factors -- among them, the quality of students' previous academic preparation, their family values, traditions, and culture, their motivation and aptitude, the influence of their peers and role models, and even their knowledge of the availability of student aid -- rather than just the financial means to attend college. Few studies have been designed to assess the impact of student aid on access, choice, and persistence apart from all of these other factors. More studies using multivariate analyses are needed in order to understand better the complex interactions among different types of students, different types of aid, and different types of institutions regarding the impact of aid on educational opportunity and participation.

References

Advisory Commission on Intergovernmental Relations. *The Federal Role in the Federal System: The Dynamics of Growth. The Evolution of a Problematic Partnership.* Washington, D.C.: The Commission, May 1981.

Ahumada, Martin M. *Tuition and Student Aid Policy in Minnesota: A Case Study.* Denver: Education Commission of the States, February 1985.

--. *Tuition and Student Aid Policy in Connecticut: A Case Study.* Denver: Education Commission of the States, February 1986.

Astin, Alexander W. "Personal and Environmental Factors Associated with College Dropouts Among High Aptitude Students." *Journal of Educational Psychology*, 55 (1964) 219-227.

--. *Predicting Academic Performance in College.* New York: The Free Press, 1971.

--. "Student Persistence: Some Stay, Some Don't -- Why? *College and University*, 48 (1973) 298-306.

--. *Preventing Students from Dropping Out.* San Francisco: Jossey-Bass, 1975.

--. *The Impact of Student Financial Aid Programs on Student Choice.* Los Angeles: Higher Education Research Institute, 1978.

Blanchfield, W. "College Dropout Identification: A Case Study." *Journal of Experimental Education*, 40 (1971)1-4.

Boyd, J. D. "History of State Involvement in Financial Aid," in *Perspectives on Financial Aid.* New York: College Entrance Examination Board, 1975.

Breneman, David W., and Finn, Chester E., Jr., eds. *Public Policy and Private Higher Education.* Washington, D.C.: Brookings Institution, 1978.

Case, Karl E., and McPherson, Michael S. *Does Need-Based Student Aid Discourage Savings for College?* Washington, D. C.: The Washington Office of The College Board, January 1986.

Congressional Budget Office. *Federal Student Assistance: Issues and Options.* Washington, D. C.: U.S. Government Printing Office, 1981.

Dickmeyer, Nathan; Wessels, John; and Coldren, Sharon L. *Institutionally Funded Student Aid.* Washington, D.C.: American Council on Education, 1981.

Fife, Jonathan D. *Applying the Goals of Student Financial Aid.* ERIC-Higher Education Research Report No. 10. Washington, D.C.: American Association for Higher Education, 1975.

Fife, Jonathan D., and Leslie, Larry L. "The College Student Grant Study: The Effectiveness of Student Grant and Scholarship Programs in Promoting Educational Opportunity." *Research in Higher Education* (APS Publications, Inc.), 4 (1976) 317-333.

Hanson, W. Lee. "Impact of Student Financial Aid on Access." in Joseph Froomkin, ed., *The Crisis in Higher Education: Proceedings of The Academy of Political Science*, 35:2 (1983) 84-96.

--. "Economic Growth and Equal Opportunity: Conflicting or Complementary Goals in Higher Education?" in Edwin Dean, ed., *Education and Economic Productivity.* Cambridge, Mass.: Ballinger, 1984, pp. 57-94.

Herndon, Steve. "The Efficacy of Student Financial Aid: Are the Proposed Funding Reductions and Program Limitations Warranted in the Best Interests of America's Citizenry? *The Journal of Student Financial Aid.* (National Association of Student Financial Aid Administrators, Washington, D.C.) 12:2 (May 1982) 37-44.

--. "Factors That Differentiate Between Persisters and Dropouts Among Recipients of Financial Aid." *Journal of College Student Personnel*, 25:14 (July 1984) 367-368.

Hood, Albert B., and Maplethorpe, Cheryl K. "Bestow, Lwend, or Employ: What Difference Does It Make?" in Joe B. Henry, ed. *The Impact of Student Financial Aid on Institutions. New Directions for Institutional Reasearch* 25. San Francisco: Jossey-Bass, 1980.

Jensen, Eric L. "Student Financial Aid and Persistence in College." *Journal of Higher Education*, 52:3 (May-June 1981) 280-294.

--. "Student Financial Aid and Degree Attainment." *Research in Higher Education* (Agathan Press, Inc.),20:1 (1984) 117-127.

Johnson, Jane. "Designing State Student Aid Policies for the 1980s, in Larry L. Leslie and James Hyatt, eds. *Higher Education Financing Policies: States/Institutions and Their Interaction*. Tucson: Center for the Study of Higher Education, College of Education,University of Arizona, October 1981, pp. 34-40.

Kelly Robert N. "High Costs, High Need: The Independent Colleger and Student Assistance," in Joe B. Henry, ed. *The Impact of Student Financial Aid on Institutions: New Directions for Institutional Research 25*. San Francisco: Jossey-Bass, 1980, pp. 15-32.

Kramer, Martin. "A Decade of Growth in Student Assistance," in Joseph Froomkin, ed., *The Crisis in Higher Education: Proceedings of The Academy of Political Science*, 35:2 (1983) 61-71.

Leslie, Larry L. *Higher Education Opportunity: A Decade of Progress*. ERIC-Higher Education Research Report No. 3. Washington, D. C.: American Association for Higher Education 1977.

--. "Changing Patterns in Student Financing of Higher Education." *Journal of Higher Education*, 55:3 (May-June 1984) 313-346.

Lynton, Ernest A. "Colleges, Universities, and Corporate Training," in G. G. Gold, *Business and Higher Education: Toward New Alliances. New Directions for Experiential Learning* 13. San Francisco: Jossey-Bass, 1981.

Morse, Suzanne W. *Employee Educational Programs: Implications for Industry and Higher Education*. ASHE-ERIC Higher Education Research Report 7, 1984. Washington, D.C.: Association for the Study of Higher Education, 1984.

New York State Higher Education Services Corporation. Aid and Access: *The Role of Financial Aid in Access to Postsecondary Education for Different Ethnic Groups in New York State*. Albany: The Corporation, October 1984.

Nixon, Richard M. "Message on Higher Education to the Congress of the United States," March 19, 1970.Quoted in Charles B. Saunders, "Reshaping Federal Aid to Higher Education," in Joseph Froomkin, ed., *The Crisis in Higher Education: Proceedings of The Academy of Political Science*, 35:2 (1983) 117-134.

President's Commission on Higher Education. *Higher Education for American Democracy*. Six Volumes. Washington, D.C.: U.S. Government Printing Office, 1947.

Saunders, Charles B. "Reshaping Federal Aid to Higher Education," in Joseph Froomkin, ed., *The Crisis in Higher Education: Proceedings of The Academy of Political Science*, 35:2 (1983) 117-134.

Sewell, William H. "Inequality of Opportunity for Higher Education." *American Sociological Review*, 36 (October 1971) 793-809.

Suter, Larry E. *Trends in College Enrollments by Family Income for Regions of the United States*. Washington, D.C.: U.S. Bureau of the Census, 1977.

University of California Task Force on Retention and Transfer. *Retention and Transfer: University of California Undergraduate Enrollment Study*. Berkeley: Office of the Academic Vice President, University of California, June 1980.

Voorhees, Richard A. "Financial Aid and Persistence: Do the Federal Campus-Based Aid Programs Make a Difference?" *The Journal of Student Financial Aid*. (National Association of Student Financial Aid Administrators, Washington, D.C.) 15:1 (Winter 1985) 21-30.

Wenc, L. M. "Retention, Attrition, and Student Financial Aid," in R. H. Fenske and R. P. Huff, eds., *Handbook of Student Financial Aid: Programs, Procedures, and Policies*. San Francisco: Jossey-Bass, 1983, pp. 330-346.

Zollinger, Richard A. "Financial Aid and Equity of College Choice: The Illinois Experience." *Journal of Education Finance*, 10:1 (Summer 1984) 121-131.

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature.

Members of the Commission

The Commission consists of 15 members. Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. The other six represent the major segments of postsecondary education in California.

As of 1986, the Commissioners representing the general public are:

Seth P. Brunner, Sacramento, *Chairperson*
C. Thomas Dean, Long Beach
Seymour M. Farber, M.D., San Francisco
Patricia Gandara, Sacramento
Ralph J. Kaplan, Los Angeles
Roger C. Pettitt, Los Angeles
Sharon N. Skog, Mountain View
Thomas E. Stang, Los Angeles, *Vice Chairperson*
Stephen P. Teale, M.D., Modesto

Representatives of the segments are:

Sheldon W. Andelson, Los Angeles; representing the Regents of the University of California

Claudia H. Hampton, Los Angeles; representing the Trustees of the California State University

Beverly Benedict Thomas, Los Angeles; representing the Board of Governors of the California Community Colleges

Jean M. Leonard, San Mateo; representing California's independent colleges and universities

Willa Dean Lyon, Newport Beach; representing the Chairman of the Council for Private Postsecondary Educational Institutions

Angie Papadakis, Palos Verdes; representing the California State Board of Education

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs."

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including Community Colleges, four-year colleges, universities, and professional and occupational schools.

As an advisory planning and coordinating body, the Commission does not administer or govern any institutions, nor does it approve, authorize, or accredit any of them. Instead, it cooperates with other state agencies and non-governmental groups that perform these functions, while operating as an independent board with its own staff and its own specific duties of evaluation, coordination, and planning,

Operation of the Commission

The Commission holds regular meetings throughout the year at which it debates and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California. By law, the Commission's meetings are open to the public. Requests to address the Commission may be made by writing the Commission in advance or by submitting a request prior to the start of a meeting.

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of its director, who is appointed by the Commission. On August 1, 1986, William H. Pickens assumed the directorship from Patrick M. Callan.

The Commission issues some 30 to 40 reports each year on major issues confronting California postsecondary education. Recent reports are listed on the back cover.

Further information about the Commission, its meetings, its staff, and its publications may be obtained from the Commission offices at 1020 Twelfth Street, Third Floor, Sacramento, CA 98514; telephone (916) 445-7933.

ONE of a series of reports published by the Commission as part of its planning and coordinating responsibilities. Additional copies may be obtained without charge from the Publications Office, California Postsecondary Education Commission, Third Floor, 1020 Twelfth Street, Sacramento, California 98514; telephone (916) 445-7933.

Other recent reports of the Commission include:

86-4 Expanding Educational Equity in California's Schools and Colleges: Recommendations of the Intersegmental Policy Task Force on Assembly Concurrent Resolution 83 (March 1986)

86-5 Background for Expanding Educational Equity: A Technical Supplement to the Report of the Intersegmental Policy Task Force on Assembly Concurrent Resolution 83, *Expanding Educational Equity in California's Schools and Colleges* (March 1986)

86-6 Director's Report, March 1986: Overview of the 1986-87 Governor's Budget for Postsecondary Education in California (March 1986)

86-7 Standardized Tests Used for Higher Education Admission and Placement in California: A Report Published in Accordance with Senate Bill 1758 (Chapter 1505, Statutes of 1984) (March 1986)

86-8 Feasibility Plan for a Comprehensive Student Information Study: A Report to the Legislature and Governor in Response to Assembly Bill 880 (1984) (March 1986)

86-9 The Need for Statewide Long-Range Capital Outlay Planning in California: An Issue Paper Prepared for the California Postsecondary Education Commission by Frank M. Bowen. (March 1986)

86-10 High School-College Relations in California and The Articulation Council: A Report to the California Postsecondary Education Commission by William Chance (April 1986)

86-11 Update of Community College Transfer Student Statistics, University of California and the California State University, Fall 1985 (April 1986)

86-12 Time and Territory: Phase II. A Report to the Legislature in Response to Supplemental Language in the 1985-86 Budget Act. (April 1986; see 86-2 for the first of these two related reports)

86-13 Progress in Facilitating the Transfer of Community College EOPS Students: A Report to the Legislature and Governor in Response to Assembly Bill 1114 (Chapter 1586, Statutes of 1985) (April 1986)

86-14 A Permanent Site for Los Angeles Mission College: A Report to the Legislature and Governor in Response to a Request for Capital Funds from the Los Angeles Community College District. (April 1986)

86-15 Student Financial Aid in California: The First of Two Background Papers on Student Financial Aid Issues and Options Prepared for the California Postsecondary Education Commission, May 1986 (May 1986)

86-17 Director's Report, May 1986: Enrollment Trends in California Higher Education, 1980-1985 (May 1986)

86-18 Director's Report, June 1986: The Master Plan After Twenty-Five Years. (June 1986)

86-19 Analysis of the State University's Criteria for Approving Permanent Upper-Division and Graduate Off-Campus Centers: A Report to the Governor and Legislature in Response to Senate Bills 785, 1060, and 1103 (1985) (June 1986)

86-20 Annual Report on Program Review Activities 1984-85: The Tenth in a Series of Reports to the Legislature and Governor on Program Review by Commission Staff and California's Public Colleges and Universities (June 1986)

86-21 Eligibility for Institutional Participation in the Cal Grant Program: A Report to the Legislature and Governor in Response to Senate Bill 362 (Chapter 772, Statutes of 1985) (June 1986)

86-22 Transforming Data into Information: Improving Student Performance Reporting: A Staff Report to the California Postsecondary Education Commission (June 1986)